

2nd 80s Fire

Equipment Decontamination Plan

03/31/2019

Approval:

Position	Name	Signature	Date
Incident Commander			
FOSC			
SOSC			

1. Introduction

The purpose of this plan is to identify the establishment of the Equipment Decontamination (Decon) Site prescribed by Unified Command in order to conduct decontamination operations in a safe, organized and efficient manner while minimizing damage to the environment and waste generation.

Additionally, this plan serves to identify general guidance procedures to be followed by personnel performing decon on all equipment and vessels involved with spill response operations. Because these operations may involve transiting through slicks, operating within impacted waters or recovery operations, we may assume that vessel hulls, decks, machinery, tanks, piping, deck gear and other areas will be impacted. This plan will be used for all vessels, mechanical recovery equipment, and support equipment, either contaminated or suspected of being contaminated, in order to return all to a non-impacted state.

2. SITE SPECIFICS

This site is presented as a proposed option for Decon activities

Proposed Decon Site

Site Name: Enterprise

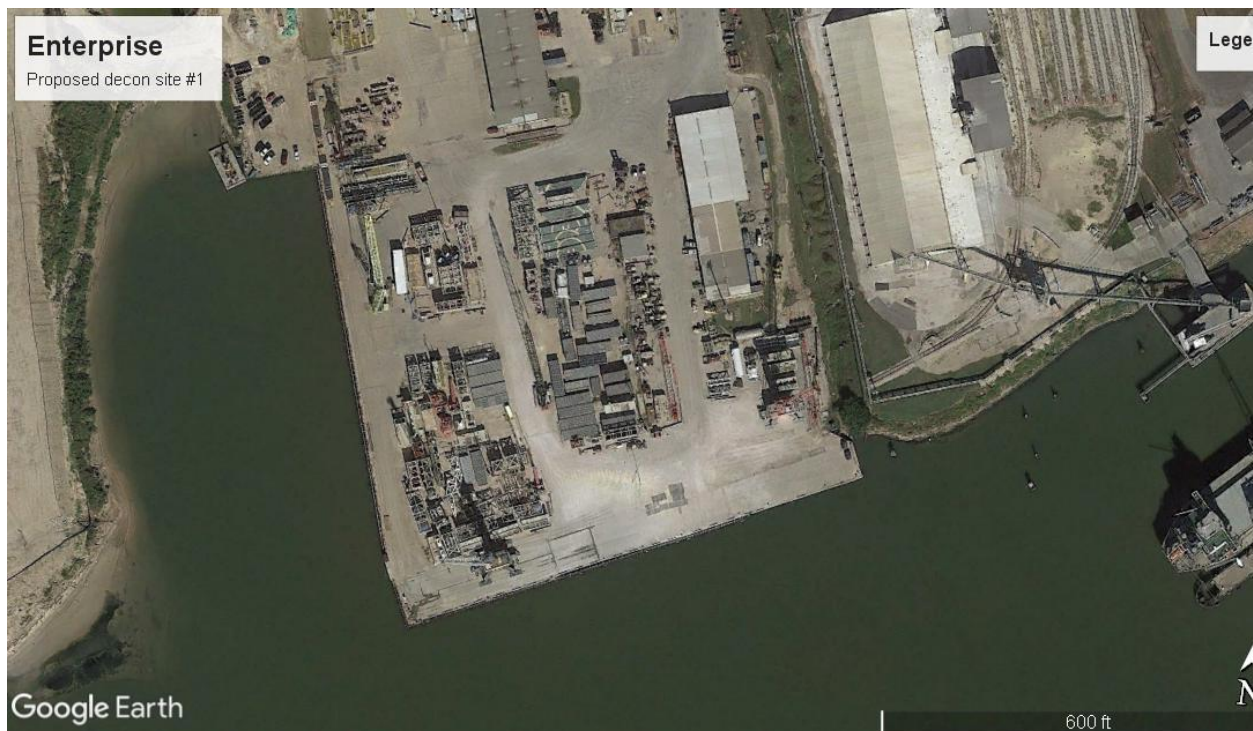
Physical location: East of Beltway 8, east end of Enterprise property. West of ITC property

Address: 15902 Peninsula St., Houston, 77015

Description: 4 acre site with bulkhead, crane and secure access and egress. West bulkhead measures 650'. South bulkhead measures 650'. Total available bulkhead is 1300'. Level, clean concrete pad. Water on site available. Two buildings available, large warehouse and office space.

Contact Person:

Phone:



3. EQUIPMENT DECON OVERVIEW

Industry standards and best practices require, and Oil Spill Removal Organizations (OSROs) and regulators demand, that the Responsible Party (RP) must decon all equipment that was deployed in response to the spill before it is released from the incident and returned to its owners. This applies to boats and boom, but also applies to trailers, pumps, skimmers, pressure washers, etc.

The purposes for promptly establishing a Decon site and operating procedures at any spill are several: to ensure that the contractor-owned and government-owned equipment will be ready for deployment at the next spill or drill without causing a sheen when it is deployed; so that equipment hauled over the road doesn't drip product or otherwise spread contamination beyond the spill site, particularly onto roads or parking lots. In most states this is a requirement by state transportation and/or environmental agencies; so that equipment is returned to its owners in roughly the same condition it was in when it arrived; and as a cost control measure, so that equipment that is either no longer needed for the response or has broken down or can otherwise no longer be used, is returned to its owner as quickly as possible so that it comes "off the clock."

All contaminated equipment used in the spill response will be deconned to a condition of cleanliness agreeable to both the Unified Command and the equipment owner.

Consumable supplies for Decon operations will be provided through the established OSRO(s) for this incident.

The MSRC OSRV and Clean Channel Co-op barges mobilized for this response will be decontaminated according to specific procedures provided by MSRC and CCC and as such, are outside the scope of this Plan.

4. ORGANIZATION

The Decontamination Group will be organized as follows:

Decon Group Supervisor
Decon Manager
Decon Supervisor
Boom Decon Foreman
Vessel Decon Foreman
Equipment Decon Foreman
Site Safety Officer
Air Monitoring Project Manager

5. CONCEPT OVERVIEW

In view of the extensive equipment inventory involved in this response effort, the Decon Contractor will do the following:

- oversee gross decontamination of response vessels, in the field prior to transition to decon site;
- establish and oversee temporary berthing of impacted vessels; and
- oversee final decontamination of spill recovery vessels, response vessels, containment boom, mechanical skimmers and other response equipment.

The primary focus of this operation will be to expedite cleanup of impacted vessels and response equipment in a safe, organized and efficient manner while minimizing further damage to the environment and waste generation. Personnel health and safety will be of utmost importance during all decon operations.

Equipment decontamination will occur as follows:

- Recovered product is to be off-loaded from skimmer cargo tanks to portable storage tanks and/or vacuum trucks pending transfer to ITC in accordance with the incident-specific Waste Handling Plan
- Equipment to be transferred into a bermed area and decontaminated.
- All equipment will undergo full decontamination prior to demobilization.

6. DOCUMENTATION

A Certificate of Decontamination Form will be utilized for each piece of equipment that is to be decontaminated, in order to track equipment undergoing decon as well as to document acceptance of the equipment by its owner when decon is complete.

Paper and electronic files will be maintained by the Decon Manager for each piece of equipment and each batch of boom that comes to the site. Copies of all completed Certificate of Decontamination forms and Boom Release from Decon forms will be provided to the Resource Unit Leader daily so that response resource records can be maintained up to date.

All Decon files will be turned over by the Decon Manager to the Documentation Unit Leader, with copies to the Finance Section Chief, upon completion of Decon operations and demobilization of the Decon site.

7. DECONTAMINATION PROCEDURES

7.1 Safety

Personnel safety will always be the highest priority at the Decon site. Air monitoring will be conducted in accordance with all state and federal regulations, and with the incident-specific Work Area Air Sampling and Analysis Plan.

See Attachment **A** - Site Specific Safety Plan

7.2 Confined Space

Any confined space entry required as part of this decontamination project will be issued a confined space entry permit and rescue team will be on standby.

Equipment decontamination is planned to occur in two phases:

- Recovered product is to be off-loaded from skimmer cargo tanks to portable storage tanks and/or vacuum trucks pending transfer to ITC in accordance with the incident-specific Waste Handling Plan.
- Equipment to be transferred into a bermed area and decontaminated.
- All equipment will undergo full decontamination prior to demobilization.

A priority assessment of each piece of equipment will be made by the Decon Manager as it arrives at Decon, to ensure a timely flow of equipment through the decon process and to ensure that higher cost equipment is able to be demobilized as promptly as possible. The Logistics section will provide guidance in this regard; e.g., Logistics will notify the Decon Manager when a high-cost piece of equipment such as a self-propelled skimmer is scheduled to be demobilized soon and/or is on its way to Decon. Depending

upon the priority assigned by the Decon Manager, equipment will be directed to either the Decon staging area or to a decon pool.

If equipment arrives at Decon by water, the shoreline will be lined with visqueen, industrial cloth or other appropriate material to prevent damage to the shoreline and/or secondary contamination by the impacted equipment, as well as to prevent damage to the equipment. Deployed boom will be collected at a designated site where the boom will be loaded into lined roll-off containers for transport to the Decon site.

All decon operations will take place in Decon pools, which will be set up on either side of an open roadway such that trucks and trailers can safely enter and exit without turning around and without interrupting work operations or endangering personnel. The pools will be set up on clean, flat ground on layers of visqueen and industrial carpet or 40 mil HDPE matting. Each decon pool will be constructed with a wide swath of visqueen around it to allow for splash potential and will be bordered by curbing that includes sorbent boom in order to prevent effluent from the pools from escaping containment and contaminating the ground.

Trucks will be backed into a pool to be cleaned. Boats, skimmers and other equipment will be set in a pool by crane or forklift if required.

All trailered equipment will be backed into a decontamination pool.

Upon entering a pool, all equipment will first be thoroughly sprayed down with degreaser and scrubbed and / or hot water washed until clean. A bio degradable cleaning solution, yet to be determined and approved by the UC, will be utilized as a degreaser and will be applied by a Hudson sprayer as applicable. The cleaning solution to be selected may be citrus based so that it does not leave a petroleum sheen on the equipment after the cleaning process. Once approved by the UC an SDS for the cleaning solution will be provided. Actual pressure washing, if required, will utilize a hot/cold pressure washer with a temperature range up to 220° F and a pressure rating up to 5000 psi. All personnel tasked with operating pressure washers shall be required to wear modified PPE Level D which can include, but is not limited to raingear, gloves, eye protection and metatarsal guards.

Every attempt will be exercised to mitigate noise-generating equipment by placing it in insulated areas. Once the piece has been determined clean to the owner's standard, the equipment will be demobilized.

8. CONTAINMENT BOOM AND PORTABLE EQUIPMENT

A separate decontamination area has been identified for containment boom and small equipment. The above-mentioned method will be used to clean all containment booms and any small equipment involved in the spill response. Boom will be bundled and tied in 100 ft sections and returned to their owner once it has been inspected by them and approved. Mechanical recovery equipment may require a breakdown to allow for access to areas and components of that equipment which may harbor residual product not readily visible or observed during visual inspection.

9. RESPONSE VESSELS

The vessels lifted will be lifted with a crane (operated by a certified Crane Operator using a Certified Rigger) and placed inside standard contractor containment berms during the decontamination process. Vessels will be blocked using 12"x12" wood cribbing. A decontamination team will be assigned to the bermed area. Most vessels require the hull to be washed / wiped to remove residual product. They will be deconned in a designated area. When the vessel is to be cleaned it will be moved into a containment

berm. All efforts will be made to remove residual product from the hull and machinery. The vessel will be released from the decon area following an inspection, approval, and signature by the owner.

Rinsate generated from decon operations will be collected from the pools by a vac truck and transferred to frac tanks. As the liquid level in a frac tank approaches approximately $\frac{3}{4}$ full, the Decon Manager/Decon Foreman will request a 130 bbl vac truck to transfer the contents to ITC in accordance with the incident-specific Waste Handling Plan.

10. CERTIFICATE OF DECONTAMINATION

For this project, a Certificate of Decontamination (Attachment B) has been created. This document reflects the date of entry into the decontamination area along with an adequate description of each piece of equipment to be decontaminated. Once approved by the equipment owner's representative, the said representative will sign and date the certificate of decontamination. A digital photo will accompany the certificate of decontamination and will be turned in to the spill management team.

Once a piece of equipment has been determined to be clean by the Decon Manager, it will be moved to a clean holding area at Decon and the owner's authorized representative will be notified. The owner's authorized representative will signify his/her concurrence that the equipment has been sufficiently cleaned by completing and signing the Released to Owner section of the Certification of Decontamination form.

As it comes out of the pool, each section of boom will be bundled and tied, a uniquely numbered tag, including owner identification, will be placed on each bundle by the Foreman (including destroyed boom), and the tag numbers will be recorded by the Foreman and/or the Supervisor. Not all boom will be photographed as it arrives at Decon - only sections of boom that are determined by the Decon Manager and/or the Foreman to be damaged beyond repair will be photographed.

A Boom Release from Decon form (Attachment C) will be executed for each quantity of boom that is picked up by its owner, which will document the size and total number of feet of boom covered by that form, the number of feet considered serviceable, the number of feet considered damaged but repairable, and the number of feet that are damaged beyond repair and will be retained at Decon and managed in accordance with the incident-specific Waste Handling Plan. These forms will be cosigned by the owner's representative and the Decon Manager or Foreman, and a copy given to the owner's authorized representative.

A support zone will be established within the Decon site for consumable supplies, bottled water, etc. At least one break tent and/or building will also be established within the Decon site to allow workers to take breaks out of the weather.

11. SAFETY/SECURITY

All personnel working in or near the pools will always be properly attired in raingear, gloves, eye protection and metatarsal guards. In the interest of maintaining a safe work environment, workers who violate this PPE policy will receive one warning and will be subject to possible dismissal for subsequent violations.

A site-specific Safety and Health Plan will be established for the Decon site and appended to the overall response Site Safety and Health Plan. Air monitoring will be conducted in accordance with all state and federal regulations and the incident-specific Work Area Air Sampling and Analysis Plan. A contracted ambulance will always be staged on site when decon activities are in progress.

All personnel engaged in Decon activities shall possess a valid TWIC .
24-hour site security will be maintained at the Decon Facility throughout the decon process.

12. PERSONNEL REQUIREMENTS

Decon will be managed by a Decon Manager provided by NRC. Decon will be staffed by the selected Decon contractor in such numbers of supervisory personnel and workers as the Decon Manager deems appropriate each day as the workload varies.

Operations will run up to 24 hours a day, in two shifts up to 12 hours each, as the Decon Manager deems appropriate each day considering the amount of equipment ready to be decontaminated and demobilized on a given day. The anticipated maximum number of personnel required for a shift will be as follows, although work demands may at times call for more:

Positions

Decon Manager (1)
Decon Supervisor (2) *two per shift*
Decon Foreman (3) *three per shift*
Decon Site Safety Supervisor (1) *one per shift*
Decon workers (70) *seventy per shift*
Air Monitoring Teams (6)*

*Two man team per 12 hour shift with AreaRAEs to cover the work area and perimeter monitoring of decon (one to man the computer console and one to maintain equipment and verify readings). Plus one person per shift to roam the neighboring facilities for VOCs and benzene

13. EQUIPMENT REQUIREMENTS

The following equipment will be used to conduct Decon operations, although it is recognized that other equipment and/or supplies may be utilized as determined by the Decon Manager in consultation with the Foreman:

Equipment and Materials
130 bbl Vac truck
70 bbl Vac truck
500 bbl Frac tank
Lifting Crane
All-terrain fork lift Crane truck
Light towers
Hoses / steam cleaners
2" diesel centrifugal pumps Degreaser
Hand-operated sprayers (Hudson sprayers)
25' x 50' Decontamination pools
25' x 110' Decontamination pools
Sorbents / Visqueen
PPE
Hand tools

Wood pallets

Air monitoring equipment (AreaRAEs, UltraRAEs, others as necessary)

14. SITE DEMOBILIZATION

Upon final breakdown and closure of the equipment decontamination operation, a joint survey of the facility will be conducted by the Responsible Party, EPA, and other participating agencies. Any signs of contamination from the decontamination operation will be addressed by the Responsible Party to a mutually agreed condition of cleanliness.

Attachments:

Boom Release from Decon form

Certificate of Decontamination

Site Specific Safety Plan